

**KENTUCKY DEPARTMENT OF EDUCATION**  
**STAFF NOTE**

**Action/Discussion Item:**

704 KAR 3:305, Minimum Requirements for High School Graduation (Final)

**Applicable Statute(s) or Regulation(s):**

KRS 156:160, 704 KAR 3:305, 703 KAR 5:020

**Action Question:**

Should the Kentucky Board of Education (KBE) give final approval to 704 KAR 3:305, Minimum Requirements for High School Graduation?

**History/Background:**

***Existing Policy.*** The Kentucky Board of Education has identified secondary education as a priority, with the goal that each and every student will attain a high school diploma that credentials him/her as prepared for a next level of education and work. Changes to the current minimum high school graduation requirements are under consideration. Appendix A shows a comparison of the current and proposed high school graduation requirements.

During the October 2005 meeting, the Kentucky Board of Education considered a proposal for amendment of 704 KAR 3:305, Minimum Requirements for High School Graduation. At that time, the Board asked Department staff to return in December with further information related to certain key questions:

- Is there research supporting the introduction of Algebra II and mathematics every year as a graduation requirement?
- If the minimum high school graduation requirements are changed to require a single, rigorous college and work-ready curriculum for all, should an opt-out provision be provided?
- Generally, how will the proficiency or competency be defined for the purposes of performance-based credit?
- Specifically, how will the proposed requirement for demonstrated competency in world languages be defined as a high school graduation requirement?
- Specifically, how will the proposed requirement for demonstrated competency in technology be defined as a high school graduation requirement?
- Will schools have sufficient flexibility in scheduling to incorporate the new requirements as well as the technology and world languages requirements without reducing student access to electives?

## **Policy Issues and Options:**

### **Is there research supporting the introduction of Algebra II and mathematics every year as a minimum graduation requirement?**

In mathematics, the Department has proposed three required credits (Algebra I, Geometry and Algebra II or a course of equal rigor) and mathematics every year. The American Diploma Project, the National Governors Association, ACT, The College Board and others have called for an increase in the rigor of mathematics education in the nation's high schools. In Kentucky, the Prichard Committee and the Business Forum are calling for a more rigorous course of study for every student and higher levels of mathematics for every student based on analysis of available research. ACT's research shows that certain courses, including advanced math courses beyond Algebra II, have a strong impact on student performance and college readiness (See Appendix B). A recent study from Auburn University states that:

“ . . .national statistics suggest that time since the last high school math course may be a significant contributing factor in poor math performance. The National Center for Education Statistics (Perkins, 2004) reports that only half of graduating high school seniors take math their senior year, but these students outperform others completing math in earlier years. . . .”<sup>i</sup>

*Recommendation:* The Department recommends the original proposal of three credits of mathematics (Algebra I, Geometry, Algebra II or a course of equal rigor) and math every year to help ensure that:

- Students who enter the 9<sup>th</sup> grade not prepared to begin the study of high school mathematics have time to receive appropriate development instruction and are, therefore, more likely to master the three credits across four years and less likely to drop out.
- Students who enter the 9<sup>th</sup> grade having already begun their study of high school mathematics are guaranteed the opportunity to take higher-level mathematics courses until they exit high school.
- All students are continuously engaged in mathematics so that they are at less risk of being placed in remediation or of losing the mathematical skills and concepts that they need to be successful in college and work.

### **If the minimum high school graduation requirements are changed to require a single, rigorous college and work-ready curriculum for all, should an opt-out provision be provided?**

According to the American Association of State Colleges and Universities (AASCU), eighteen states now offer what AASCU classifies as diplomas that align more closely with college admission requirements. AASCU notes that while the college preparatory curriculum is the “default” curriculum, students in these states are allowed to opt out with parental permission, which has the effect of establishing another diploma. In many states, the reluctance of some educators and parents to require all students to take Algebra II has driven the decision to introduce opt out provisions. Sixteen states have specific language

about opting out or alternative routes for diplomas, usually for students with disabilities, but sometimes for larger groups of students.

Achieve states that only Arkansas, Indiana, and Texas have set the expectation that all students will participate in a rigorous college and work preparatory curriculum, noting that every student is “opted in” but that each state still allows students with informed parental permission to opt out:

- Texas requires the approval of both a counselor and a parent for a student to opt out of the Recommended High School Program and into the Minimum Graduation Program.
- Starting with the class of 2010, students in Arkansas will be required to take the Smart Core curriculum to graduate, unless the parents sign a waiver that allows the child to take a less rigorous sequence of courses.
- Indiana’s Core 40 will be required for graduation beginning with the class of 2010-2011. Students will also be required to pass the Core 40 graduation examination. With parental request, any student may be exempted from the Core 40 and complete a general curriculum to graduate. Students with disabilities, who do not achieve a passing score on the graduation examination, may be determined to be eligible to graduate with recommendation of a committee, if the student meets other performance requirements

*Recommendation:* The Department recommends that minimum high school graduation requirements be changed to require a single, rigorous college and work ready curriculum for all. The Department recommends against an opt-out provision. However, the Department has revised the language of 704 KAR 3:305 Section 2.1(c) to clarify appropriately rigorous substitutions for a traditional Algebra II course.

*Generally, how will the proficiency or competency be defined for the purposes of performance-based credit?*

Through the Refocusing Secondary agenda, the Kentucky Board of Education has endorsed the principle that each and every student should be engaged in a rigorous, relevant curriculum and supported by meaningful relationships with other students, educators and the community throughout the secondary years. Fundamental to that principle is the notion that every student’s academic and extracurricular experiences should be personalized, or individualized, to the extent possible and that students should be rewarded for results against learning goals rather than for time spent in class. The Board has expressed its intention that the high school diploma credential mastery of content knowledge as well as the ability of a student to apply that knowledge in real world situations, particularly in real world situations that are directly related to the student’s area of academic and career interest. This opens up opportunities for students to demonstrate proficiency in the context of applied learning. In fact, as a student’s course

of study becomes more individualized in the upper years of high school, the manner in which their progress is assessed will need to become more individualized as well.

For this reason, the Board is considering including performance-based credit in 704 KAR 3:305 as a basis for student advancement and credentialing as an option or in combination with the traditional Carnegie Unit. Currently, performance-based credit is minimally defined in the *Program of Studies*. The challenge to the Board is determining the level of guidance to provide through administrative regulation, whether proficiency assessments and grading criteria should remain a decision at the local level, and to what extent the state should monitor the rigor and reliability of performance-based credit implementation in local schools. In considering this question, the Board must consider to what extent these factors are monitored or what assurances are provided in a Carnegie Unit based system.

Regardless of how credit is granted, districts should ensure that the rigor of any credit-bearing course or learning opportunity is sufficient to prepare the student to pursue postsecondary education or enter the workforce.

Currently, districts such as Oldham County, Jessamine County, and Pike County are utilizing different types of performance-based credit options including:

- Portfolios
- Senior projects
- Capstone projects
- Online and other technology mediated courses
- Industry certifications
- Equivalencies, such as dual credit classes

Department staff would continue to communicate models of performance-based credit options to districts and schools as other models are developed and refined.

The criteria for performance-based credits should ensure:

- Alignment with *Core Content for Assessment, Program of Studies, and Academic Expectations*
- Authentic application of knowledge
- Objective scoring
- Multiple ways and opportunities for students to demonstrate proficiency
- Student access to state provided assessments for the purpose of earning credit

*Recommendation:* Staff recommends maintaining the language as proposed in 704 KAR 3:305 Section 4(2-3).

*Specifically, how will the proposed requirement for demonstrated competency in world languages be defined?*

*Recommendation(s):* The Department recommends that the requirement for demonstrated competency in a world language be deleted from the proposed minimum graduation requirements. Instead, the Department recommends that the Board adopt a long-range goal for the attainment of demonstrated competency in a world language as a requirement for graduation for the graduating class of 2016. The Department will submit to the Board, under separate cover, a phased plan to build capacity for the teaching and learning of world languages in preparation for the introduction of accountability and consequences for students in later years.

*Specifically, how will the proposed requirement for demonstrated competency in technology be defined as a high school graduation requirement?*

In 80 percent of the states, the technology standards for students are based on the National Educational Technology Standards for Students (NETS-S) Technology Foundations for Students, a broad conceptual framework of technology knowledge developed by the International Society for Technology in Education (ISTE). These standards give schools a framework for planning technology-based activities that not only supports instruction but also improves students' technology skills. The standards cover six categories: 1) Basic operations and concepts; 2) Social, ethical and human issues of technology; 3) Common productivity tools; 4) Technology communications tools; 5) Technology research tools; and, 6) Problem-solving and decision making skills aided by technology.

Adoption of these standards would be accomplished through revision to the *Kentucky Program of Studies*. Currently, technology standards are embedded within the different content areas but the technology standards will be more closely aligned to the *National Educational Technology Standards for Students (NETS-S)* and *21<sup>st</sup> Century Skills for 21<sup>st</sup> Century Learners*.

*Recommendation:* The Department recommends that a uniform online assessment be available across the state and provided to districts at no cost. Similar to proposed provisions for world language competency, the technology competency should be able to be assessed and credentialed at any time during the student's middle and high school career. In addition to an assessment made available at the state level, local districts should have the option of using alternate measures such as portfolios, performance criteria and projects as long as they are based on mastery of content and performance standards in the *Program of Studies*. These alternate assessment measures should be directly related to the student's Individual Graduation Plan.

*Will schools have sufficient flexibility in scheduling to incorporate the new requirements as well as the technology and world languages requirements without reducing student access to electives?*

During the October 2005 Board meeting, Department staff were asked to return in December with sample scenarios of how the proposed graduation requirements might be implemented without limiting student access to electives.

Appendix C provides three examples of master schedules. To summarize the graphics, a traditional seven period course schedule, a traditional block, or even a modified block schedule would allow students the opportunity to earn all required credits, engage in course work that prepare students to demonstrate competency, and allow students the flexibility to engage in elective course work that would align to their IGP. The traditional and modified block each allow for 32 possible credits while the traditional seven-period day with classes offered for a full school year would allow 28 possible credits.

### **Impact on Getting to Proficiency:**

Once *Kentucky's Program of Studies for Kentucky Schools* and the *Core Content for Assessment* are brought into alignment, the increased rigor required for high school graduation will encourage more high level learning experiences in Kentucky classrooms. These experiences will allow students to reach proficiency within the state assessment system but more importantly be successful in their postsecondary endeavors.

### **Groups Consulted and Brief Summary of Responses:**

- District Instructional Support Staff from districts in the Alliance Network (October 12, 2005) - Feedback was supportive of changes, especially the freedom to provide integrated and interdisciplinary courses for students.
- Instructional Support Network (ISN) (October 13, 2005) – Specific feedback focused on implications for implementation of the new requirements. The ISN participants remarked on the need for teachers specifically in the areas of world languages and mathematics. They also expressed the need for professional development for teachers and clearer definitions of proficiency for technology and world languages.
- Kentucky Association of Secondary School Principals (November 3, 2005) - Group praised decisions related to increased rigor and flexibility to provide relevant math courses for students in their senior year to increase student success and reduce need for remediation in postsecondary.
- Interim Joint Committee on Education (November 14, 2005) - Commissioner Wilhoit presented an overview of the proposed changes and responses were presented by a local superintendent and a secondary level guidance counselor.
- Local Superintendents Advisory Council (November 29, 2005) - Feedback will be provided to the Board via a letter from this body.

**Contact Person:**

Starr Lewis, Associate Commissioner  
Office of Teaching and Learning  
502-564-2106  
[slewis@kde.state.ky.us](mailto:slewis@kde.state.ky.us)

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**Deputy Commissioner**

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**Commissioner of Education**

**Date:**

December 2005

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<sup>i</sup> Annual Conference of the Southern Association for Institutional Research, *College Math Performance and Last High School Math Course*, October 2004.